

Notice of Allowability

Application No.

10/685,026

Examiner

LOAN TRUONG

Applicant(s)

WRIGHT ET AL.

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/27/2007.
2. ☒ The allowed claim(s) is/are 1-31.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

1. Authorization for this examiner's amendment was given in a telephone interview with Mr. Charles E. Shemwell Reg. No. 40,171 on March 29, 2007. Please replace claims 1, 11, 17 and 22 accordingly.

1. (Currently Amended) A content addressable memory (CAM), comprising:
 - a first set of CAM locations coupled to store a first set of values;
 - a second set of CAM locations coupled to store a second set of values;
 - an input control circuit coupled to the first and second sets of CAM locations and operable in an error detection mode and a normal mode, wherein the second set of values is a copy of the first set of values when the input control circuit is in the error detection mode, and wherein the second set of values is independent from the first set of values when the input control circuit is in the normal mode; and
 - a comparator coupled to compare a search key value against the first and second set of values and report an error if a first location within the first set of CAM locations that produces a

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match is different from a first location within the second set of CAM locations that produces a match when the input control circuit is in the error detection mode.

11. (Currently Amended) The CAM as recited in claim 1, further comprising:

a match suppression bit associated with both the first set of values and the second set of values; and wherein

the comparator is configured to report an error if the first location within the first set of CAM locations that produces a match is different from the first location within the second set of CAM locations that produces a match, regardless of whether the match suppression bit is a set when the input control circuit is in the error detection mode.

17. (Currently Amended) A content addressable memory (CAM), comprising:

a first block of CAM locations;

a second block of CAM locations; and

an input control circuit operable in an error detection mode to receive a set of values and to store the set of values in the first block of CAM locations and a copy of the set of values in the second block of CAM locations, and operable in a normal mode to receive first and second sets of values and to store the first set of values in the first block of CAM locations and the second set of values in the second block of CAM locations.

22. (Currently Amended) A method of operation within a content addressable memory (CAM), comprising:

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selecting between an error detection mode of operation and a normal mode of operation in response to a signal received by an input control circuit;

storing a first set of values in a first set of CAM locations and a duplicative set of values in a second set of CAM locations when the error detection mode is selected;

searching for matches between a key and duplicative sets of values within the respective first and second sets of CAM locations;

recording the first location within the first set of CAM locations and the first location within the second set of CAM locations that produce a match; and

generating an error if the first location within the first set of CAM locations is at a different index than the first location within the second set of CAM locations.

Allowable Subject Matter

2. Claims 1-31 are allowed.

The following is an examiner's statement of reasons for the allowance:

The examiner deem claims 1-31 as novel when read as a whole for the limitations of an input control circuit coupled to the first and second sets of CAM locations and operable in an error detection mode and a normal mode, wherein the second set of values is a copy of the first set of values when the input control circuit is in the error detection mode; and wherein the second set of values is independent from the first set of values when the input control circuit is in the normal mode;

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loan Truong whose telephone number is (571) 272-2572. The examiner can normally be reached on M-F from 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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